

ABSTRACT

The present invention provides a genetic engineering material for insects that enables a target protein to be
5 purified easily, without requiring the use of recombinant baculovirus, while simultaneously providing a process for producing exogenous protein using that genetic engineering material. A gene recombinant silkworm is obtained by inserting an exogenous protein gene such as a
10 cytokine gene coupled to a promoter that functions in silk glands into a silkworm chromosome. An exogenous protein such as a cytokine is then extracted and purified from the silk glands or cocoon of that silkworm or its offspring. A large amount of exogenous protein can be
15 produced within silk gland cells, outside silk gland cells or in silk thread or a cocoon by inserting an expression gene cassette, in which the DNA sequence of the 3' terminal portion and the DNA sequence of the 5' terminal portion of fibroin H chain gene are fused to the
20 exogenous protein gene, into silk gland cells and so forth.